IN THE CLAIMS

1.   (Cancelled)

2.   (Cancelled)

3.   (Previously amended)   A system as claimed in claim 15 wherein said navigation system includes identifiers, selected from the group consisting of detectable marks and position sensors, which are respectively attachable to said image signal acquisition unit and to said second subject and which are identifiable as to position by said position acquisition unit.

4.   (Previously amended)   A system as claimed in claim 15 wherein said image signal acquisition unit comprises an ultrasound laparoscope.

5.   (Previously amended)   A system as claimed in claim 15 wherein said image signal acquisition unit comprises an X-ray source and an X-ray receiver.

6.   (Previously amended)   A system as claimed in claim 15 wherein said imaging unit produces a 3D image of said first subject from said image signals.

7.   (Previously amended)   A system as claimed in claim 16 wherein said imaging unit produces a 2D image of said first subject from said image signals.

8.   (Original)   A system as claimed in claim 7 wherein said 2D image represents an image plane in said first subject, and wherein said mixing unit mixes an indication of a distance of said second subject from said image plane into said 2D image.

9.   (Previously amended)   A system as claimed in claim 15 wherein said position acquisition unit simultaneously identifies the position of said image signal acquisition unit and the position of said second subject.

10.   (Previously amended)   A system as claimed in claim 15 further comprising an acceptance device for said first subject and wherein said position acquisition device identifies a position of said acceptance device simultaneously with identifying the position of said image signal acquisition unit and the position of said second subject.

11.   (Cancelled)

12.   (Cancelled)

13.   (Cancelled)

14.   (Cancelled)

15.   (Previously Amended)   A system comprising:

an image signal acquisition unit for acquiring 2D image signals of an examination subject in real time, and an imaging unit for producing a 2D image of the examination subject in an image plane from said 2D image signals;

an instrument having a tip adapted for interaction with the examination subject;

a navigation system including a position acquisition unit for determining a position of said image signal acquisition unit and for determining a position of said tip relative to said position acquisition unit; and

a mixing unit connected to said imaging unit for mixing a representation of said tip into said 2D image and, if said tip is not located in said image plane, for determining a distance of said tip from said image plane and for mixing a designation of said distance into said 2D image, said

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designation being alterable and indicating a magnitude of said distance.

Please amend claim 16 as follows:

16. (Currently amended) A system comprising:

a C-arm X-ray image data acquisition unit for acquiring 3D image data of a ~~first subject~~ <u>patient</u>, and an image unit for producing a 3D image of the ~~first subject~~ <u>patient</u> from said image data;

a support mechanism for supporting the first subject;

a position acquisition system for determining a position of said C-arm X-ray image data acquisition unit, said support mechanism, and a ~~second subject~~ <u>medical instrument adapted for insertion into the patient,</u> relative to said C-arm X-ray image data acquisition unit; and

a mixing unit for mixing a representation of the ~~second subject~~ <u>medical instrument</u> into said 3D image of said ~~first subject~~ <u>patient</u> dependent on said position of said C-arm X-ray image data acquisition unit, said support mechanism, and said ~~second subject~~ <u>medical instrument</u> relative to said C-arm X-ray image data acquisition unit.

17. (Previously Amended) A system as claimed in claim 16 wherein said navigation system includes identifiers, selected from the group consisting of detectable marks and position sensors, which are respectively attachable to said C-arm X-ray image data acquisition unit and to said second subject and which are identifiable as to position by said position acquisition unit.

Cancel claims 18, 19 and 20.

18. (Cancelled)

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19.   (Cancelled)

20.   (Cancelled)

Please amend claim 21 as follows:

21.   (Currently amended)   A system as claimed in claim 16 wherein said position acquisition unit simultaneously identifies the position of said C-arm X-ray image data acquisition unit and the position of said ~~second subject~~ <u>medical instrument</u>.

Claim 22 has been amended as follows:

22.   (Currently amended)   A system as claimed in claim 16 wherein said position acquisition unit simultaneously determines said position of said C-arm X-ray image data acquisition unit, said support mechanism and said ~~second subject~~ <u>medical instrument</u> relative to said C-arm X-ray data acquisition unit.

23.   (Cancelled)

24.   (Cancelled)

25.   (Cancelled)

26.   (Cancelled)

27.   (Cancelled)

28.   (Cancelled)

29.   (Cancelled)

30.   (Cancelled)

31.   (Previously added) A system as claimed in claim 15 wherein, if said tip is not located in said image plane, said mixing unit mixes a projection of said tip in said image plane into said 2D image.

32.   (Previously added) A system as claimed in claim 15 wherein said mixing unit mixes a circle, as said designation, into said 2D image, said circle having a diameter which is alterable dependent on said magnitude of said distance.

33.   (Previously added) A system as claimed in claim 15 wherein said mixing unit mixes said designation into said 2D image with an alterable color intensity indicating said magnitude of said distance.